

This thesis deals with the calculation of the premium for model of excess of loss reinsurance with reinstatements (XL-reinsurance with reinstatements). In the first part except the description of the basic model, we devote to derivation of the formula for calculating the pure premium. Furthermore, we show the detailed calculation procedure of the pure premium including the derivation of the probability function for the composite distribution of the total reinsurer's participation in claims here. The thesis also describes the method of PH transformation, which is used to determine the risk adjusted premium. In the second part we show these procedures on concrete examples for various probability distributions of the amount of claims and the number of claims.